### CHECKLIST ENVIRONMENTAL ASSESSMENT

**Project Name:** 9<sup>th</sup> Street Bridge Debris Removal

**Proposed** 

Implementation Date: April 8, 2007
Proponent: Park County

**Location:** Section 24 T2S R9E

County: Park

**Encumbered Trust** Common Schools

### I. TYPE AND PURPOSE OF ACTION

During the spring runoff of 2008, Livingston's Ninth Street Bridge experienced significant undermining resulting in one pier sinking approximately 18 inches. As a result of the damage to the bridge including subsidence of one pier and scour of the remaining piers, it is widely felt by Park County personnel and their engineering contractors that the bridge should be removed to avoid further damage and potential catastrophic flooding to the Ninth Street Island and the City of Livingston.

Native fill material (Yellowstone River area pit run) will be hauled in from a nearby pit and used to create equipment access to the area as well as isolate a work platform in sections, so that it is kept clear of free flowing water during demolition. This process will take place in phases in order to access the old bridge in its entirety. The bridge will be taken down in sections and pieces as feasible, utilizing modern demolition equipment, and loaded into trucks and taken to the local landfill for disposal. All concrete, steel, debris and as much as feasible, the work platforms (native fill, pit run) will be removed from the river. Machines, equipment, personnel and as much debris as possible will be removed from the river following each day of work. Following bridge removal, the thalweg will be reshaped in the center of the channel and allowed to freely migrate. In addition, a portion of the left (north) abutment will be repaired. This abutment was undermined as a result of flood flows and the abutment will be formed and repaired using concrete, flowable fill and rip rap.

With the construction of temporary working platforms and access routes, approximately 15,000 ft² of streambed will be impacted during the bridge decommissioning. All efforts to reduce resource impacts will be made. Machines will be free of grease, oil and power washed before entering the worksite. Of utmost importance is the safety of workers and the public.

# II. PROJECT DEVELOPMENT

# PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

April 2, 2009, Park County Commission, Public Informational Meeting regarding the 9<sup>th</sup> Street Bridge. The minutes of the meeting are available at <a href="http://www.parkcounty.org/">http://www.parkcounty.org/</a> Pages 10 – 14 for the week of March 30, 2009.

Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.

The Natural Heritage Species of Concern

# 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

124 permit, Montana Fish Wildlife and Parks Section 404 Permit, Section 10 Permit, U.S. Army Corps of Engineers

#### 3. ALTERNATIVES CONSIDERED:

No action – Do not issue a Land Use License to allow work in the Yellowstone River bed for demolition and removal of the compromised 9<sup>th</sup> St. Bridge.

Issue a Land Use License to allow work in the Yellowstone River bed for demolition and removal of the compromised 9<sup>th</sup> St. Bridge.

# III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

## 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Overall, the project is expected to improve channel stability by returning the stream to a more naturally functioning condition that is capable of efficiently transporting fine sediment. Materials that are to be hauled in (other than rip rap and cement) will be similar in structure, size and transportability to native river bed materials so that long term effects of these imported fill materials will not change the existing condition. All stream channel alterations will take place during low flow and final channel training will take place to minimize long term effects of thalweg manipulations.

It is the purpose of the project to alleviate potential problems upstream and downstream by removing the old bridge structure. By allowing for greater flow capacity and sediment conveyance, the project serves to eliminate existing hazards.

All temporary work platforms will be either hauled out or graded to elevations so that they will easily be redistributed during higher flows. No elevated work platforms will remain.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

# 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Short-term increases in turbidity will occur during project demolition. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. Working platforms will be created so that machinery, personnel and materials can be manipulated above flowing water. These work platforms (consisting of native pit run) will be constructed to isolate bridge debris and sedimentation from entering the active part of the river during removal.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

# 6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

Air quality is good. No impacts to air quality are expected due to this License.

#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

No vegetation will be affected.

### 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The work will take place in the seasonally low flow period. Fill material (temporary work platforms) will include the use of native materials similar in structure and size to the existing bed materials which will isolate work areas from active flows. Impacts to terrestrial and aquatic life include, stream bank re-grading for access roads, temporary filling of streambed, heavy equipment in the channel, re-grading of pier scour holes and short-term pulses of turbidity. All of these activities may result in a temporary decrease in insect production and minor reduction of fish holding areas in the immediate area.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

#### 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The Natural Heritage Species of Concern Report sited Yellowstone Cutthroat Trout, and the long-billed Curlew as Species of Concern. This license allows work that is short term in duration and has a limited scope of disturbance, no impact would be expected.

# 10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

No sites would be expected.

#### 11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

During the period of construction, aesthetics would be adversely impacted due to on-site construction activities and the presence of heavy equipment. Construction is expected to occur over a three to four week period. In the long term, aesthetics would be enhanced by removing a degraded un-used bridge across the Yellowstone River and allow for a more naturally functioning reach of river.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

# 12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

#### 13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.

9<sup>th</sup> Street Bridge Gas Line Bore, Park County, MT, DNRC Trust Lands Division, Bozeman Unit, April 2009.

### IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

#### 14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

**No Action Alternative:** If no action is taken, there is a significant risk that the existing Ninth St. Bridge will partially or completely fail during the next runoff event. If this were to happen, there is a strong possibility that flooding in the City and the county (Ninth St. Island). Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

**Action Alternative:** The proposed alternative is designed to remove the existing, failing bridge. This work would restore the natural function of the stream channel and provide conditions that would allow for the efficient transport of river flows and sediment. This alternative also addresses the significant risk to public safety and residents of the area.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

### 15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

None

### **16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposal would have no affect on quantity and distribution of employment.

### 17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

None

#### 18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

None

#### 19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

None

### 20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This project will vastly improve safe access through the reach of river by recreationists. It has been well documented that the existing piers represent a significant impediment to floaters and in recent years has imperiled many users. The removal of the five piers will lower that impediment, allowing for increased quality of recreational activities and public safety.

(Environmental Assessment of the Removal of the Ninth St. Bridge, Livingston, Park County, MT, Montana Fish, Wildlife and Parks, Region Three, Bozeman, MT, April 2009.)

### 21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

None

#### 22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No disruption or affect on communities should be expected.

#### 23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

This project would not affect the unique quality of the area.

# 24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Once demolition and removal is complete Park County will provide survey and purchase a permanent easement for the bridge serving the 9<sup>th</sup> Street Island the proceeds of which will benefit the Common School Trust.

Draw and I Draw	Name:	Craig Campbell/s/	Date:	4/07/09
	Title:	Bozeman Unit Manager		

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#### 25. ALTERNATIVE SELECTED:

I have selected the alternative to issue a Land Use License to allow work in the Yellowstone River bed for demolition and removal of the compromised 9<sup>th</sup> St. Bridge.

# **26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The potential impacts of the bridge demolition are not significant compared to the likely effects if the damaged bridge were allowed to fail and collapse into the river. Other agencies with jurisdiction over the actions have already completed their review, and the required permits are in place, or will be in place, prior to the demolition. To prevent potential significant adverse effects from occurring, removal is planned to begin immediately, to avoid spring 2009 run off.

A requirement of the License will be that the Park County submits a survey and easement application for a new replacement bridge. That future application will require separate review under the MEPA, as there are insufficient details currently available to allow consideration of that action under this EAC.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:							
EIS		More Detailed EA	X No Further Analysis				
EA Checklist Approved By:	Name:	D.J. Bakken (for Garry Will	ams)				
	Title:	Acting CLO Manager					
Signature: /s/ Darrel J. Bakken		kken	<b>Date</b> 4/8/2009				